



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,258	07/26/2006	Akihiko Fujii	293717US0PCT	6672

22850	7590	12/28/2009
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314		

EXAMINER	
KING, FELICIA C	

ART UNIT	PAPER NUMBER
1794	

NOTIFICATION DATE	DELIVERY MODE
12/28/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/587,258	Applicant(s) FUJII ET AL.	
	Examiner FELICIA C. KING	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is written in response to Applicant's Request for Reconsideration filed 9/23/09. Claims 1-8 are pending.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. **Claims 1, 2, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stelkens (GB 354,942) Sosuke et al. (JP 6-315434 Translation).**

Regarding Claim 1: Stelkens discloses a coffee composition where poisonous substances are removed using a zinc chloride activated carbon [page 1, lines 12-26 and Page 1, lines 95-106]. Further, Sosuke discloses a coffee composition where "coffee poor ingredients" are removed by filtering coffee through activated carbon near 30 -100 Å in size, coconut husk activated carbon near 10Å in size, or zeolite (an absorbent mineral mix) around 1-5 Å in size [0007, 0011, 0013, 0014].

At the time of the invention it would have been obvious to one of ordinary skill in that art having Stelkens and Sosuke before him or her that mixing the coffee grounds in Stelkens with activated carbon having the Å (angstrom) sizes as disclosed in Sosuke would result in a product having reduced levels of poisonous substances such as HHQ. The coffee grounds in Stelkens are treated using a very similar process as in the instant specification [See instant Application Example 7] because Stelkens uses a similar activated chloride method as discussed in the instant claim and Sosuke uses the same particles sizes as discussed in the instant application, it would have been obvious that the treatment of coffee grounds with activated carbon having similar Å size would result in a coffee product having significantly reduced levels/removal of poisonous substances such as HHQ and to continue to reduce the levels of undesirable chemicals such as HHQ in coffee by

Art Unit: 1794

using the activated carbon method, until the desired level/removal of the poisonous substance was obtained. Stelkens' and Sosuke's failure to specifically recite the removal of the named substance HHQ does not negate the fact that a poisonous substance such as HHQ is removed by the activated carbon method at the disclosed particle size.

Regarding Claim 2: Stelkens and Sosuke disclose a coffee composition treated in a similar manner as described above and as such it would have been obvious that the coffee composition would have similar properties when analyzed by HPLC as the coffee composition in the instant claims.

Regarding Claim 6: Stelkens discloses treatment via activated carbon [lines 96-99]. Sosuke discloses treatment via activated carbon [0007, 0011, 0013, 0014].

Regarding Claim 7: Stelkens discloses carbon activated by the zinc chloride method [lines 96-100].

3. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stelkens (GB 354,942) in view of Sosuke et al. (JP 6-315434 Translation) and Schlichter (US 3,615,666).

Regarding Claim 3: Stelkens discloses a coffee composition treated to remove poisonous materials as discussed above but does not disclose a soluble coffee composition. Sosuke discloses removing "coffee poor ingredients" by using activated carbon as discussed above. However, Schlichter discloses a soluble coffee composition [col. 1, lines 4-9].

At the time of the invention it would have been obvious to one of ordinary skill in the art having the teachings of Stelkens, Sosuke, and Schlichter before him or her to modify the composition of Stelkens to include a soluble coffee composition as in Schlichter because it provides an faster alternative to the traditional brewed coffee as desired by consumers.

Art Unit: 1794

Regarding Claim 8: Stelkens discloses the coffee composition as discussed above but does not disclose spray drying or freeze drying the composition. Sosuke discloses removing “coffee poor ingredients” by using activated carbon as discussed above. However, Schlichter discloses a composition made by freeze drying or spray drying [col.3, lines 51-55].

At the time of the invention it would have been obvious to one of ordinary skill in the art having the teachings of Stelkens, Sosuke, and Schlichter before him or her to modify the composition of Stelkens to include a soluble coffee composition as in Schlichter because it provides an faster alternative to the traditional brewed coffee as desired by consumers. Further it is very well known in the art that soluble/instant coffees are prepared by freeze drying.

4. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stelkens (GB 354,942) in view of Sosuke et al. (JP 6-315434 Translation) and Behrman (US 2,430,663).

Regarding Claim 4: Stelkens discloses a coffee composition as discussed above but does not specify providing the coffee in a package. Sosuke discloses removing “coffee poor ingredients” by using activated carbon as discussed above. Behrman discloses a packaged dry coffee composition [col.1, lines 6-10].

At the time of the invention, it would have been obvious to one of ordinary skill in the art having the teachings of Stelkens and Behrman before him or her to modify the coffee composition of Stelkens to include a packaging mechanism because packaging maintains the qualities and flavors of coffee [Behrman col.1, lines 24-27].

Regarding Claim 5: Stelkens discloses a coffee composition and as such would be expected to have similar properties as analyzed by HPLC as discussed above. Sosuke discloses removing

Art Unit: 1794

“coffee poor ingredients” by using activated carbon as discussed above. Behrman discloses packaging the coffee product as discussed above.

Response to Arguments

5. Applicant's arguments filed 9/23/09 have been fully considered but they are not persuasive.

On page 3 of Applicants' Request for Reconsideration, Examiner acknowledges Applicants' reproduction of experiments in view of the Sosuke disclosure upon which Applicants bases the deficiency of the prior art's lack of indicating the removal of HHQ. However, it appears that the applicant has taken the disclosure of Sosuke alone in order to show the extraction of HHQ. However, Stelkens and Sosuke were used in combination. Examiner is unsure as to why an extraction time of 3 minutes was used in Applicants' experiment; especially where the disclosure in Stelkens has a 5 minute exposure time and Sosuke was incorporated to show the type of filtering material. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Further, as disclosed in Stelkens the coffee composition obtained by the extraction process is further diluted until it reaches a drinkable concentration [pg. 2, lines 1-7]. Referring back to the Declaration submitted by Applicant on 4/24/09, it was determined that under Stelkens the HHQ would have been .00112%. As disclosed in Stelkens, the coffee was initially extracted with 100 ml to 200 ml of water and then diluted up to 1L with water to produce a drinkable coffee composition. The instant claims recite a coffee composition containing from 0% to 0.00005% HHQ. Based upon the experiments conducted by Applicants, it would have been obvious that by further diluting the

Art Unit: 1794

extracted coffee at points up to 1 L, that the amounts of chlorogenic acid and HHQ would have been diluted to meet the limitations of the claims.

Further it appears from applicant's specification that time and dilution is a factor in attaining desirable HHQ levels. In the Specification, pages 39-41 including Table 5, applicants allow the coffee to undergo extraction for 30 minutes and further allow for the extracted coffee to be diluted to balance. Variables such as time and dilution are well known in the art and it would have been obvious to one having ordinary skill to lengthen extraction time to extract more of a substance and further that by diluting a substance with water thereby increasing the volume, that substances contained in the product would have been reduced relative to the overall composition.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FELICIA C. KING whose telephone number is (571)270-3733. The examiner can normally be reached on Mon- Thu 7:30 a.m.- 5:00 p.m.; Fri 7:30 a.m. - 4:00 p.m. alternate Fridays off.

Art Unit: 1794

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. K./

Examiner, Art Unit 1794

/Jennifer McNeil/

Supervisory Patent Examiner, Art Unit 1794